BY ORDER OF THE COMMANDER AIR EDUCATION AND TRAINING **COMMAND**

AETC INSTRUCTION 48-102 19 DECEMBER 2001

Aerospace Medicine

★MEDICAL MANAGEMENT OF UNDERGRADUATE FLYING TRAINING **STUDENTS**



COMPLIANCE WITH THIS PUBLICATION IS MANDATORY

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OPR: HQ AETC/SGPA (SMSgt J. Richardson) Certified by: HQ AETC/SGP (Col J. Little) Supersedes AETCI 48-102, 30 November 1999

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This instruction implements AFPD 48-1, Aerospace Medical Program. It establishes procedures and assigns responsibility for the medical management of US and foreign personnel entered into joint specialized undergraduate flying training (JSUFT) programs, including officers and other personnel undergoing the enhanced flight screening program (EFSP). It applies to all AETC units conducting undergraduate aircrew training. It does not apply to Air Force Reserve Command or Air National Guard.

Maintain and dispose of records created as a result of processes prescribed in this publication in accordance with AFMAN 37-139, Records Disposition Schedule (will become AFMAN 33-322, Volume 4). See Attachment 1 for a glossary of references and supporting information.

SUMMARY OF REVISIONS

This document is substantially revised and must be completely reviewed.

Adds information about extending students on medical hold (paragraph 12.3.). Changes the OPR from HQ AETC/SGPS to HQ AETC/SGPA.

Section A—Medical Standards

- 1. Pilot Training. Flying Class I.
- **2.** Navigator Training. Flying Class I or IA.
- 3. Non-US Euro-NATO Joint Jet Pilot Training Program (ENJJPT) Students:
 - 3.1. Students will have evidence of a parent-nation medical clearance in their health record, such as a NATO "medical statement." The US Air Force will accept preexisting conditions waived by the parent nation unless there is serious concern about health or safety as a result.

- 3.2. Medical disqualifications from flying training and groundings exceeding 30 days for non-US ENJJPT students (and instructor pilots [IP]) will be coordinated by the local flight surgeon through HQ AETC/SGPA and the appropriate parent-nation liaison to HQ AFMOA/SGOA.
- 3.3. Routine temporary medical groundings will be processed in the same manner as for US Air Force students. Refer to Chapter 11 of AFI 48-123, *Medical Examination and Standards*, for specific guidelines.
- **4. Rotary-Wing Pilots Attending Joint Specialized Undergraduate Pilot Training (JSUPT).** The se students are rated officers. Apply medical standards for Flying Class II. On reporting to a JSUPT base, these students will be interviewed and have a medical records check to ensure a current Flying Class II medical examination is on file—the short or long examination or a preventive health assessment (PHA). If JSUPT base medical personnel determine a particular medical history item or defect needs to be evaluated, they may conduct evaluations to the extent necessary to clear the pilot for Flying Class II.

5. Other US Armed Forces:

- 5.1. Student aviators and rated or designated aviators must meet the physical standards of their parent service, regardless of where the training is to be conducted. Initial waivers of physical standards required prior to the start of training must be granted by the parent service. Students must arrive with a certified physical examination, current by parent-service directives.
- 5.2. An initial clearance will be issued based on the parent service's physical examination and certification.
- 5.3. After the student inprocesses, he or she falls under the administrative requirements, physiological training, airsickness management, sick-call procedures, and medical hold procedures of the host service.
- 5.4. Routine medical groundings will be accomplished in the same manner as for US Air Force students.
- 5.5. Physical examinations performed during the tour of duty will be conducted in accordance with the administrative procedures of the host service, and the medical standards of the parent service apply.
- 5.6. Any new or permanent disqualifying condition or defect discovered during the tour of duty will be submitted through HQ AETC/SGPA, parent-service waiver authority, and, if necessary, HQ AFMOA/SGOA for a waiver determination.
- **6. Security Assistance Training Program (SATP) Students.** Unless the student has been previously medically certified for Flying Class I or IA, the 59 MDW/MRPF, Lackland AFB TX, will accomplish complete Flying Class I or IA medical examinations on each SATP student scheduled for JSUFT. These examinations will be completed early in the language training period to permit review and certification by HQ AETC/SGPA before the student is sent to flying training. These examinations are valid for 36 months from the date they are accomplished, not certified.

Section B—Medical Management at the EFSP and Flying Training Base

7. Initial Entry:

- 7.1. Each individual reporting to the EFSP must possess a current Flying Class I medical examination that is valid through completion of training. An individual who reports to the EFSP with an expired medical examination will be returned to his or her home base. On a case-by-case basis, an individual with unique circumstances may have a determination of his or her medical qualification coordinated with HQ AETC/SGPA.
- 7.2. The 59 MDW/MRPF will perform an initial screening of inprocessing EFSP students. The screening will include:
 - 7.2.1. Medical records review for current physical examination and interval medical history.
 - 7.2.2. DNA testing (if not on record).
 - 7.2.3. Footprints (if not on record).
 - 7.2.4. Vision test (near and far).
 - 7.2.5. Hearing test (in accordance with the baseline hearing conservation program).
 - 7.2.6. Flight surgeon's interview.
- 7.3. Students inprocessing for JSUPT and joint specialized undergraduate navigator training (JSUNT) will have a current Flying Class I or IA medical examination on record. The examination must be current within 36 months prior to starting JSUPT or JSUFT. SF 93, **Report of Medical History**, must be verified as current within 12 months prior to start of training.
 - 7.3.1. JSUPT candidates must meet Flying Class I standards for entry into the EFSP. Pilot candidates must have a current, certified Flying Class I examination on record and pass the EFS-Medical screening examination at Brooks AFB TX. A Preventive Health Assessment Flying Class II physical examination will be accomplished prior to beginning active flying in JSUPT. This physical is valid for 2 years or until the end of the first birth month following graduation from introduction to fighter fundamentals (IFF) and initial upgrade training.
 - 7.3.2. JSUNT candidates must have a current, certified Flying Class IA examination on record and meet Flying Class II standards. A Preventive Health Assessment Flying Class II physical examination will be accomplished prior to beginning active flying in JSUNT. The validity of this physical is the same as specified in paragraph 7.3.1.
- 7.4. The vision screening information will not invalidate prior vision waivers or exception to policies, but it will be used to provide students with appropriate corrective lenses before initiation of the flying phase of training.
- 7.5. Students with substandard visual acuity that can be easily corrected may have their lenses ordered on a priority basis from the area optical fabrication laboratory. At the discretion of the medical facility commander, one pair of lenses may be purchased locally to reduce the duty not involving flying (DNIF) time. Individuals who have had substantial deterioration of their visual acuity since their Flying Class I examination will be fully re-evaluated to rule out underlying pathology. Report evaluation findings to HQ AETC/SGPA.
- 7.6. JSUFT students are authorized to use soft contact lenses in accordance with AFI 48-123, Attachment 17, if the following criteria is met:

- 7.6.1. Students must be experienced with approved lenses in order to qualify for use of soft contact lenses. An "experienced" user is defined as someone who has worn approved contact lenses problem-free for at least 6 months. Use of soft contact lenses in JSUFT will be voluntary.
- 7.6.2. Pilot candidates are not authorized to wear contact lenses within 30 days prior to reporting to the EFSP.
- 7.7. If the medical condition remains stable, all previously granted waivers due to expire during the flying training period will be extended locally to the end of the first birth month following completion of training. Contact HQ AETC/SGPA for borderline or controversial cases.
- 7.8. Aerospace medicine physicians must brief each incoming female student individually on birth control and the consequences pregnancy would have on her flying career. The interview will be recorded in the student's outpatient medical record.
- **8.** Clearance Authority. AF Form 1042, Medical Recommendation for Flying or Special Operational Duty, will be issued following normal findings during the medical inprocessing, including non-US ENJJPT students with valid physicals from their home country. If the condition remains stable, extend the expiration date of previously granted medical waivers to coincide with the criteria specified in paragraph **7.3.1.**
- **9. Term of Validity of Physical Examinations.** The entry into training medical examination is valid through the last day of the student's first birth month following completion of JSUFT. The first annual medical examination following JSUFT graduation will be a complete examination or PHA. It will be accomplished where the student is stationed at the time the medical clearance expires.
- **10. Overweight Students.** A student found to be overweight will be evaluated to rule out underlying medical conditions that may contribute to the overweight condition or prohibit safe weight reduction. Unless the overweight condition is secondary to a medical problem, refer overweight students to their squadron commander for appropriate administrative action.

11. Airsickness:

- 11.1. Overview. Airsickness is a common problem for student fliers, and it often interferes with progression through JSUPT or JSUNT. Most students adjust to the flying environment quickly, but others require help to overcome airsickness. Recommendations to help students prevent and manage airsickness include early intervention with education, training, and, if necessary, pharmacological and physiologic therapy. Active airsickness is defined as having emesis. Passive airsickness does not include emesis; but, due to the student's discomfort or nausea, there is deviation from the mission profile.
- **11.2. AETC Airsickness Management Program (AMP).** This program consists of four phases and seeks to provide an aggressive, firm, and consistent management protocol. This protocol applies to all students undergoing JSUFT except during the EFSP where both medication and physiological adaptation with the Barany chair or similar device will not be used. Additional administrative regulations pertinent to the management of airsickness are found in AFI 48-123 and AETCI 36-2205, *Flying Training Student Administration and Management*. The four AMP phases are as follows:
 - **11.2.1. Phase 0.** During the academic phase of training, an aerospace physiology technician who is under the supervision of a flight surgeon or aerospace physiologist, a flight surgeon, or an aero-

space physiologist will brief JSUFT students on airsickness before they participate in flight or simulator training. This briefing will cover the provisions of AETCI 36-2205, Chapter 3, as well as the causes of airsickness. Details will be provided on strategies to prevent, manage, and treat airsickness.

- 11.2.2. Phase I (Airsickness Episode #1). If no underlying medical cause is found, the airsickness episode will be reviewed with the student to determine if the proper preventive measures learned in Phase 0 were followed. After reviewing all Phase 0 resources, the student will be returned to training. In situations where a student's prior history of airsickness is identified or where he or she manifests unusually high anxiety levels not believed to be associated with manifestation of apprehension (MOA), pharmacological intervention will be considered. Pharmacological therapy consists of a combination of 0.5 mg Scopolamine® and 5.0 mg Dextroamphetamine Sulfate® (Scop/Dex) and is given 1 to 2 hours prior to flight for three consecutive flights. If this combination is unavailable, use Dextroamphetamine Sulfate® 7.5 mg and Scopolamine HBr® 0.45 mg in 15 ml of elixir and/or syrup combination or another approved medication. The guidelines for which flights medical therapy is authorized are outlined in AETCI 36-2205.
- 11.2.3. Phase II (Airsickness Episode #2). JSUFT students who enter this phase will receive progressive relaxation training and pharmacologic therapy with Scop/Dex. The relaxation training will be taught by available qualified personnel at each base who may use personal instruction, videotapes, and audiocassettes to teach breathing techniques, biofeedback, and imagery skills.
- 11.2.4. Phase III (Airsickness Episode #3 and Higher). With three or more airsickness episodes, the flight surgeon's evaluation should place greater focus on the student's motivation to continue training. Individuals who maintain safe aircraft control during active or passive episodes of airsickness without the need for IP intervention should be assessed as having high motivation and generally encouraged to continue in training. Anytime during this phase, it is appropriate to consult mental health to evaluate for MOA. All students with three episodes of airsickness should receive physiologic adaptation with the Barany chair. If a student has airsickness while on Scop/Dex, ground test the student with Scop/Dex prior to the next flight, using the medication to rule out the potential for medication-induced nausea. A refresher spin in the Barany chair is recommended with any additional airsickness episodes. If for any reason a student has recently entered this phase and has missed several days of flying, a refresher spin should be given prior to flying.

11.3. Lack of Adaptability. A JSUPT student who:

- 11.3.1. Does not exhibit an ability to adapt to active airsickness prior to solo generally should be eliminated administratively for lack of adaptability unless an organic or psychiatric etiology requires medical elimination.
- 11.3.2. Successfully adapts, but then relapses due to a period away from flying (DNIF, emergency leave, etc.), should continue in training with the expectation that readaptation will occur more rapidly the second time.
- 11.3.3. Is airsick need not be eliminated for airsickness alone unless it prevents him or her from satisfactorily accomplishing his or her duties or is associated with an MOA or some organic or psychiatric cause. Elimination of JSUNT students should also be administrative for lack of adaptability unless an organic or psychiatric etiology requires a medical elimination action.

12. Medical Hold Status:

- 12.1. Students will be placed in medical hold status only when their medical condition does not resolve after 30 days. Medical hold status in such cases is effective on the 31st day of DNIF.
- 12.2. Students with remedial or temporarily disqualifying defects may be kept in medical hold status up to 3 months. On written recommendation of the wing commander and attending flight surgeon, HQ AETC/SGPA may extend a student's medical hold up to a total of 6 months. Submit an aeromedical summary with the request for extension of medical hold.
- 12.3. Students who must remain on medical hold for periods greater than 6 months to 12 months must be approved by 19 AF/DO. (Prior approval by HQ AETC/SGPA of extension to 6 months is required, but may be requested simultaneously by concurrent coordination.) Students approved for up to 12 months of medical hold will continue to be reported in accordance with the provisions of paragraph 12.4. When students extended beyond 6 months are returned to training or permanently removed, notify both HQ AETC/SGPA and 19 AF/DO. Decisions may be appealed to 19 AF/CC, HQ AETC/DO, and AETC/CC.
- 12.4. As of the last day of the month, prepare a roster of students on medical hold status (via RCS: AETC-SGPA[M]9904, *Medical Hold Roster for Month/Year*). Submit the roster to HQ AETC/SGPA within 5 workdays following the closeout period, and send an information copy to 19 AF/DO. Part "A" will contain the names of students currently in medical hold status. Part "B" will contain the names of students who were removed from medical hold status during the report period. (Negative rosters will be submitted.) **Attachment 2** contains a sample format for the medical hold roster. **NOTE:** This report is designated emergency status code C3 in accordance with AFI 33-324, paragraph 2.6, *The Information Collections and Reports Management Program; Controlling Internal, Public, and Interagency Air Force Information Collections.*
- 13. Medical Requirements Before Graduating from JSUFT. Establish procedures to ensure students complete all medical requirements for currency before they depart the JSUFT base. With a written memorandum of appointment from the local chief of aeromedical services, aeromedical technicians (7-level or above) may review the student's medical records and annotate and sign the SF 600, Health Record—Chronological Record of Medical Care, certifying medical qualification for survival training. Graduated students will not be allowed to depart a JSUFT base in a medically disqualified status unless there has been coordination with HQ AETC/SGPA. NOTE: In spite of the fact that the entry physical examination is valid until the first birth month following graduation from IFF and initial upgrade training, JSUFT graduates should be encouraged to accomplish a PHA after graduation from JSUFT and prior to follow-on training.

Section C—Elimination From JSUFT Programs

14. Overview. AETCI 36-2205 lists the categories under which students may be withdrawn from JSUFT programs. Medical disenrollment takes precedence over the other categories. In all cases except a medical deficiency, the student must remain medically qualified for training. Paragraphs **15.** through **18.** provide further information about student elimination.

15. Medical Deficiency:

15.1. Thoroughly evaluate any medical condition that renders a student incapable of meeting training requirements and standards. Prepare a current standalone aeromedical summary (via Aeromedical

Information Management Waiver Tracking System [AIMWTS]) that addresses the medical condition and recommends medical disqualification.

- 15.2. Withhold disenrollment action for medical deficiency until HQ AETC/SGPA certifies the medical disqualification. Additionally, HQ AETC/SGPA will determine medical qualification for other flying classes.
- 15.3. Following receipt of the certified aeromedical summary, complete an AF Form 422, **Physical Profile Serial Report.** Record the student's status, whether he or she is qualified for further aircrew training, and note any other medical restrictions. Send the AF Form 422 and a copy of the certified AF Form 1042 to the student's squadron for completion of the disenrollment action.
- 15.4. Do not medically eliminate non-US ENJJPT students without decertification from their parent country. Send HQ AETC/SGPA a copy of all pertinent information for coordination. Discuss questionable cases with the parent country's medical staff and HQ AETC/SGPA. When a question arises regarding a non-US student's capability to fly safely, the student may be temporarily grounded pending medical evaluation.

16. Manifestations of Apprehension (MOA):

- 16.1. MOA is considered an administrative disenrollment. It is defined as a state of psychological anxiety, apprehension, and/or physical impairment. A student may exhibit MOA through tension, anxiety, loss of appetite, sleeplessness, vague medical complaints, or airsickness.
- 16.2. The flight surgeon will interview a student with suspected MOA. In the absence of an underlying medical condition, the student's suitability for flying duty becomes an operational decision made by the line commander. The attending flight surgeon will prepare an SF 502, **Medical Record-Narrative Summary (Clinical Resume)**, stating the results of the medical interview, and attach it to an AF Form 422 reflecting assignment or training limitations.
- 17. G-Intolerance. Students experiencing recurring difficulties meeting training objectives due to the effects of G forces will be evaluated jointly by the flight surgeon and the squadron operations officer. The student will be placed in DNIF status during the evaluation. The flight surgeon will forward a summary of the medical evaluation to HQ AETC/SGPA. If a medical condition is suspected of diminishing the student's G-tolerance or G-endurance, a medical waiver will be required for continued flying duties. A healthy student unable to perform satisfactorily under G forces despite repeat centrifuge training will be handled administratively.

18. Procedures for Other Flying Training Disenrollments:

- 18.1. A flight surgeon will interview each student recommended for other flying training disenrollment to ensure there are no medical contraindications for continued flying training. The flight surgeon will resolve questionable medical conditions before issuing a medical clearance that allows disenrollment from training. A student must be medically qualified for flying duty at the time of any nonmedical disenrollment.
- 18.2. An AF Form 422 will be completed on each student recommended for elimination from flying training. In the remarks section, include the medical recommendation of qualification for other aircrew or technical training. Use an SF Form 502 to support negative recommendations. Retain a copy

- of the AF Form 422 and SF Form 502 in the student's health record and distribute other copies as required by local administrative directives.
- 18.3. A flight surgeon is often called to participate in training review board proceedings. Good medical documentation should prepare the physician to be objective and constructive in the board's deliberations. Even though a student may have no medical problems that directly affect flying training, the flight surgeon should evaluate whether frequent or long periods of DNIF may have interfered with training and advise the board accordingly.
- 18.4. If the student being reviewed is on a medical waiver or is a member of an Aeromedical Consultation Service study group, the reviewing flight surgeon will notify HQ AETC/SGPA by memorandum after the student is disenrolled.

Section D—Special Considerations

- **19. Visual Acuity Problems.** Rule out progressive ocular pathology on students whose visual acuity and refraction is significantly changed from the previous examination or found to be outside Flying Class II standards.
 - 19.1. If a student's vision and refraction are confirmed to be within Flying Class II standards without progressive ocular pathology, qualify him or her locally for Flying Class II duty and continuation of training.
 - 19.2. Submit students whose vision and refraction are outside of Flying Class II standards, or who have an aeromedically significant visual problem, to HQ AETC/SGPA for medical disqualification.
 - 19.3. Order corrective lenses on a priority basis from the area optical fabrication laboratory. At the discretion of the medical facility, one pair of glasses may be purchased locally to reduce DNIF time.

20. Requesting Initial Waiver Action:

- 20.1. Initial waiver actions are time-consuming. In order to prevent lengthy DNIF time, interim waivers may be considered on a case-by-case basis. However, the availability of fax equipment makes such verbal waivers rarely necessary. In the event a verbal waiver is unavoidable, ensure adequate medical documentation is physically available prior to initiating telephone contact with HQ AETC/SGPA. Interim waivers will only be valid for 30 calendar days and must be certified before the end of that period.
- 20.2. Medical documents necessary for waiver review by HQ AETC/SGPS are the same as for a case submitted for medical disenrollment (paragraph 15.2.). Because some medical conditions require more workup than others, flight medicine personnel must work closely with HQ AETC/SGPA to ensure all medical and administrative requirements have been met before submitting the case for waiver consideration.
- **21. Forms Adopted.** AF Forms 422 and 1042; SF 93, 502, and 600.

ATTACHMENT 1

GLOSSARY OF REFERENCES AND SUPPORTING INFORMATION

References

AFMAN 37-139, Records Disposition Schedule (will become AFMAN 33-322, Volume 4)

AFPD 48-1, Aerospace Medical Program

AFI 48-123, Medical Examination and Standards

AETCI 36-2205, Flying Training Student Administration and Management

Abbreviations and Acronyms

AIMWTS—Aeromedical Information Management Waiver Tracking System

AMP—Airsickness Management Program

DNIF—duty not involving flying

EFSP—Enhanced Flight Screening Program

ENJJPT—Euro-NATO joint jet pilot training program

EST—estimated

IFF—introduction to fighter fundamentals (course)

IP—instructor pilot

JSUFT—joint specialized undergraduate flying training

JSUNT—joint specialized undergraduate navigator training

JSUPT—joint specialized undergraduate pilot training

MOA—manifestation of apprehension

PHA—preventive health assessment

RTFS—return to flying status

SATP—Security Assistance Training Program

ATTACHMENT 2

SAMPLE FORMAT—MEDICAL HOLD ROSTER

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MEMORANDUM FOR HQ AETC/SGPS

63 Main Circle Ste 3

Randolph AFB TX 78150-4549

FROM:325 MDG/SGP

SUBJECT: RCS: AETC-SGPA(M)9904, Medical Hold for Month/Year

The following is a list of medical hold students. Part A lists students on medical hold. Part B lists students returned to flying status or taken off medical hold during this reporting period.

Part A

Noble, David W. 000-00-0000 1Lt

Class: 02-01 Phase: T-38 Total Flying Hours: 105

Date DNIF: 6 Dec 01 EST RTFS: 30 Jan 02

Diagnosis: Fracture left tibia secondary to roller blading accident

Howlett, Patricia J. 000-00-0001 2Lt

Class: 02-02 Phase: T-37 Total Flying Hours: 20

Date DNIF: 6 Jan 02 EST RTFS: 6 Apr 02

Diagnosis: Allergic rhinitis placed on immunotherapy. Maintenance dosage expected to be reached 6

Apr 02.

Part B

Olson, Sherri A. 000-00-0002 1Lt

Class 01-12 Phase: T-38 Total Flying Hours: 150

Date DNIF: 1 Apr 01 RTFS: 1 Jun 01

Diagnosis: S/P herniated disc

JOSEPHINE T. POWERS, TSgt, USAF

NCOIC, Flight Medicine